

**A COGNITIVE TASK APPROACH ON THE INFLUENCE OF OFFICE  
AUTOMATION SOFTWARE IN SECRETARIAL PRACTICE**

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## **DEDICATION**

I dedicate this work to Muhammad Rasulullah, Sallal Lahu Alaihi Wassallam.



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## ABSTRACT

Inefficiency in secretarial services in the application of office automation software has been of great concern to both secretaries and their employers. This inefficiency causes unnecessary delays in information processing and dissemination in the organization. The problem is rooted from the secretaries' lacking in appropriate application of cognitive skills, proficiency in information handling as well as working experiences, and these establish the problem statement of the study. One of the important gaps this study has bridged is establishing the key elements that can assist the secretaries to perform their office tasks effectively. Efforts made to identify similar studies on secretaries' profession were to no avail perhaps due to its non-availability or absence. It was discovered that the secretary's level of applying perception and attention during working hours is extremely limited which contributed to poor or slow pace of service delivery. The objectives of this study are to explore the secretaries office automation software cognitive task, to investigate elements of office automation software cognitive tasks that influence secretarial practice and to investigate how office automation software supports the secretaries in the execution of tasks. Snowballing sampling was used to identify participants who have fulfilled a criterion set out in the study. Therefore, twelve (12) UTHM secretarial staff who are using office automation software in their office duties were chosen to participate in the study. The study employs qualitative method, thus interviews were carried out to collect data. Thematic data analysis was done using card index. Findings revealed that the secretaries need short and long term training in order to be relevant in their working places as well as to be updated in the use of office automation software. Further results revealed that office automation software supports the secretaries in the execution of cognitive tasks. The result also revealed the development of components of office automation software cognitive tasks in secretarial practice. These components were used by the secretaries in the execution of tasks such as word processing, scheduling of appointments and other secretarial duties. Another important finding revealed that, technology has changed the working environment of the secretaries which has made it imperative for them to continue using office automation software in the execution of their tasks. This has brought the idea of how office automation software supports the secretaries in the execution of their office tasks.

## ABSTRAK

Ketidakcekapan dalam perkhidmatan setiausaha dalam penggunaan perisian automasi pejabat telah kebimbangan besar kepada kedua-dua setiausaha dan majikan mereka. Ketidakcekapan ini yang mengakibatkan kelewatan yang tidak perlu dalam pemprosesan dan penyebaran maklumat kerana kekurangan permohonan yang sesuai kemahiran kognitif serta kekurangan kemahiran dalam pengendalian maklumat dan pengalaman kerja setiausaha agung menetapkan pernyataan masalah dalam kajian ini. Kognisi mempunyai kaitan dengan bagaimana seseorang memahami dan bertindak di dunia. Kebolehan kognitif adalah kemahiran berasaskan otak yang diperlukan untuk menjalankan tugas-tugas dari yang mudah kepada yang paling sukar. Ini adalah berkaitan dengan proses bagaimana seseorang individu belajar, ingat, menyelesaikan masalah, mengamati dan keupayaan memberi perhatian. Satu lagi jurang penting kajian ini dikurangkan adalah mewujudkan kajian yang membantu setiausaha untuk melaksanakan tugas-tugas mereka dengan berkesan. Usaha-usaha dibuat untuk mengenal pasti kajian sama di profesion setiausaha adalah tidak berjaya mungkin kerana ketersediaan bukan atau ketiadaan. Ia telah ditemui bahawa tahap setiausaha memohon persepsi dan perhatian semasa waktu bekerja adalah sangat terhad yang menyumbang kepada kadar miskin atau perlahan penyampaian perkhidmatan. Objektif kajian ini, untuk meneroka setiausaha pejabat perisian automasi tugas kognitif, untuk menyiasat unsur-unsur perisian automasi pejabat tugas kognitif yang mempengaruhi amalan kesetiausahaan dan juga untuk menyiasat bagaimana perisian automasi pejabat menyokong setiausaha dalam melaksanakan tugas. Untuk membimbing kajian, tiga persoalan kajian telah digubal. Kesusasteraan penting berkaitan dengan kerja yang telah dikaji semula. Kajian ini telah dilakukan di Malaysia. Persampelan pendorong telah digunakan untuk mengenal pasti peserta yang telah memenuhi kriteria set-di dalam kajian ini. Para peserta kajian adalah dua belas (12) UTHM kakitangan setiausaha menggunakan perisian automasi pejabat dalam melaksanakan tugas mereka. Penyelidikan kualitatif adalah kaedah yang digunakan dalam kajian ini. Temuduga telah dijalankan untuk mengumpul data. Untuk menganalisis data, analisis data tematik telah dilakukan dengan menggunakan indeks kad. Dapatan kajian menunjukkan bahawa setiausaha memerlukan latihan jangka pendek dan panjang untuk menjadi relevan di tempat-tempat kerja mereka dan juga akan dikemas kini dalam penggunaan perisian automasi pejabat. Keputusan lanjut mendapati perisian automasi pejabat menyokong setiausaha dalam melaksanakan tugas-tugas kognitif. Hasilnya juga mendedahkan pembangunan komponen tugas-tugas pejabat perisian automasi kognitif dalam bidang kesetiausahawanan. Komponen-komponen ini telah digunakan oleh setiausaha dalam melaksanakan tugas-tugas seperti tugas-tugas pemprosesan perkataan, penjadualan pelantikan dan tugas-tugas setiausaha lain. Satu lagi penemuan penting mendedahkan bahawa, teknologi telah mengubah persekitaran kerja setiausaha, ini telah menjadikan ia perlu bagi setiausaha untuk terus menggunakan perisian automasi pejabat dalam melaksanakan tugas. Ini telah membawa keluar bagaimana perisian automasi pejabat menyokong setiausaha dalam melaksanakan tugas.

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PTTA UTHM  
PERPUSTAKAAN TUNKU TUN AMINAH

## CHAPTER 1

### INTRODUCTION

#### 1.1 Introduction

A secretary is an assistant to an executive officer or a manager, the secretary is trained to type and perform many office duties and also possesses personal and business attributes. The secretary guards his professional ethics of confidentiality, good appearance and absolute loyalty (Onifade, 2010).

Okoro & Amagoh (2008) reported that, Office Technology and Management (OTM), is an effective and efficient, functional and productive education, which leads to self-reliance and employment. OTM, by its nature, scope and contents, help the recipients of the course-programme to acquire relevant knowledge and skills in order to satisfy themselves for self-development and self-reliance. Graduates in this field are referred to secretaries in the working environment.

The work of a secretary in an organisation is characterized by handling and processing of information. This brings the need to discuss Information and Communication Technology (ICT). However, in this study a segment of the ICT will be the subject of discussion. This segment of the ICT is the Office Automation Software (OAS). This is because the secretary uses the office automation software in the execution of tasks in the office (Idele, 2013). OAS is defined as the tools, facilities, processes, and equipment that provide the required environment with the

physical infrastructure and the services for the generation, transmission, processing, storing and disseminating of information in all forms including voice, text, data, graphics and video (Asabere & Enguah, 2012).

From the above definition, it is clear that OAS is playing an important role in several spheres of human activity (Kuyoro *et al.*, 2012). This activities, however, also includes the office technology and management contributions which the secretary gives as an employee in an organisation as well as the vital role the secretary plays in the achievement of the organisational goals and objectives. The tasks of a secretary in an organisation include the coordination and management of the office environment, the managing of the superior's official activities and many other jobs that could be assigned to the secretary (Onifade, 2010). At this point, it is clear that the work of the secretary is characterized by receiving information, recording information, processing the information (within his office jurisdiction) and passing such information as appropriate.

Nowadays, the responsibilities of the secretary have advanced beyond typing, receiving and managing visitors coming into the organisation (Ejeka, 2010). Secretarial tasks have now advanced to a multi-line operation of office machines like the computers, the internet, photocopying machines, telephone handling, adding machines as well as organizing schedules and appointments for superior officers.

A large amount of resourceful initiatives is required from the secretary in dealing with information with regards to official tasks. The importance of information being an essential resource among several duties of the secretary has made it necessary for the secretary not to be left out of information and communication development. While in the past the secretarial profession was seen as playing a mere supporting role in the office, the present secretary has to stand up to the challenges of modern office needs, because low performance and inability to urgently meet up with the technological changes in the office could pose threat to the secretary's career (Akpormi & Ordu, 2009). This shows that the secretaries are chief organizers of meetings, record keeping, handling of incoming and outgoing mails of the organisation and managers of various activities in the office, they should be up-to-date with the desired OAS skills as well as take some measures that could improve their skills and performance.

The secretary OAS cognitive tasks are essential in the improvement of the secretary's performance. This is because the cognitive tasks lead to cognitive load and cognitive load resulted to performance. Cognitive load is an imaginary idea (Tollefson, 2000). Therefore, in this research work, it is intended to identify OAS cognitive task of the secretary in order to bring out the component with a view to enhance secretarial practice, which will in turn help the secretary to avoid cognitive overload for maximum secretarial service delivery. This study will identify some problems of OAS application related to the secretary's OAS cognitive tasks.

Therefore, information is a vital tool which the secretary uses in performing his duties. Secretaries are playing a vital role in their respective organisations for a very long time, but practice in the profession is taking too much time to change (Onifade, 2010).

Oyeronke (2012) has reported that information accelerates the level of individual advancement as well as the level of corporate and educational development. Oyeronke (2012) further reports that, information is indispensable, and access to information is very crucial. Siang *et al.*, (2009) also reported that information is a basic resource in today's society. Therefore, from the above assertions, it is generally accepted that information is an essential resource and meaningful context which the secretary use in executing official duties. According to Adejimiola (2008), information involves the transmission and reception of intelligence or knowledge. Nana (2008 & Education) views information as a mixture of data, images, texts documents, voices and many other items, intelligently organized to make meaning. James (2013), explains that information notifies, surprises, stimulates, reduces uncertainties, reveals available options, influences individuals and expresses feelings among other roles in order to make meaning.

## **1.2 Technical and Vocational Education and Training (TVET) and Office Technology and Management**

Technical and Vocational Education and Training (TVET) includes formal, non-formal and informal learning that prepare people with the knowledge and skills required in organisations.



Malaysia is seeking to improve the quality of life in its society through developing their workforce to compete in the global economy. The Malaysian government is focusing to achieve this desire through technical and vocational education and training (TVET). During the past years, advances and improvements have been made to TVET through Malaysian education and industry for “greater economic and social development” (Kefela, 2010).

The Malaysian realised that, to become global player, there is the need to provide workers with new and broader skills than ever before in order to meet the challenges of today workplace. This also brought about changes in the employment paradigm of Malaysia due to globalization and a better understanding on how competent workers can reduce the cost of operations.

Universiti Tun Hussein Onn Malaysia (UTHM) has been very active in building the capacity in TVET. UTHM is a recognised university in Malaysia which was established in 2001. UTHM is a specialized university in TVET teacher training and other strategically important activities that include among others, enhancing bilateral relationship with several local, regional and international stakeholders in TVET. The determination of UTHM in enhancing bilateral relationship with TVET stakeholders has shown UTHM potentialities to become a leading provider and referral centre in TVET through deliberate effort of positioning the university in the centre of networks.

In Nigeria, there are five Federal Universities that offers Technical and Vocational Education and Training (TVET) programmes in Nigeria. These programmes were designed to provide high technological educations and skills for employment.

The TVET programmes offered at these universities included Business Education. The department of Office Technology and Management (Education) (OTME), is under the Faculty of Business Education. Formerly OTME was called Secretarial Education, however, after reviews of the nomenclature and curriculum, the name Office Technology and Management emerged. Secretarial studies is a segment of TVET under the department of office technology and management.

### 1.3 Problem Background

Inefficiency which signifies the inability to make best use of available resources is an interesting subject either in the private or public organizations. A nature of this predicament portrays low output resulting from the attitudes towards work that emanates within the organization as well as from the larger society. In relation to that concern low performance in handling of secretarial tasks is linked to the secretary's work which is a component part of administrative service delivery. According to Chibuzo (2013), such attitudes have had the tendency of making the secretaries to be underutilized and forced them to perform below expectation.

Rapid changes in OAS has brought challenges to secretarial practice to measure up to the requirements of the day, as well as the secretary's ability to learn new working skills so as to improve performance. These challenges as reported by Chibuzo (2013) could be attributed to the secretary's lack of required training on newly introduced OAS. Another issue could be that of non-provision of OAS by the organisations where the secretaries work. It is essential to note that OAS facilitates the flow of work but it also requires self-placed learning which the secretary can explore in order to improve the secretarial tasks (Livingston & Tonia, 2012). It is a common feeling among secretaries as to other professions, that their work is a routine job and therefore is not challenging (Varsha, 2014). This argument discourages further education to people who see themselves as mere supporting staff in organisations (Akpormi & Ordu, 2009). To ensure efficient service delivery, the secretary needs to enthusiastic of learning new working skills and improved working competencies in order to cope and be able to handle OAS in performing their secretarial tasks.

Another important issue is linked to the career development of the secretaries is that, secretaries as skilled employees are concerned about their progress in terms of potentials for career placements. This means that the progresses the secretary made in the working places in terms of promotions and other benefits could be a source of motivation and likely affect progressive job performance (Agba *et al.*, 2010).

Therefore, employee career development could be related to organizational efficiency, whereby the career planning activities could lead to a more committed

work force. While the secretary's job academic requirement for employment in some developing nations is diploma in secretarial studies, other developing countries only require a certificate for employment. The acceptance of such unprofessional lower qualification by some organisations has contributed to the secretaries' unwilling attitude towards advancing their academic qualifications; a phenomenon that is also contributing to their low performance due to the low level of the secretaries' educational qualifications and skills.

Another important gap this study has bridged is establishing a study that would increase secretarial potentialities of the secretaries performance through the identification of the secretary's cognitive workload tasks load. This is important because the cognitive workload of the secretary is the mental working memory used by the secretary to execute the cognitive tasks.

Furthermore, the secretarial practice has changed overtime far beyond typing and attending to visitors. The modern secretaries are secretaries that uses the OAS and other modern office equipment's (Akpormi & Ordu, 2009). These modern secretaries of today create spreadsheets, compose correspondences, manage databases, and create presentations, reports, and documents using desktop publishing software and digital graphics (Adebayo & Akinyele, 2012). Unlike before, nowadays secretaries do less dictation and word processing tasks, and provide support to executive staff. In a number of organizations, they work in teams with a flexible schedule and share expertise. However, in developing nations, lack of the required working competencies have deprived secretaries the right to perform within their schedules of duties (ILO, 2008, Guttermaan, *et al.*, 2009). In contrast, current practice in the advanced nations indicates that secretaries are given adequate chances to perform their full responsibilities and are seen as partners who contribute to the growth of the organization.

The changing trends of modern office operations have revolutionized the way secretarial practice is carried out, the way information is collected, processed and disseminated in a systematic way (Eze, 2000). The technical work of the secretary in relation to OAS, the absence of the secretary's interest in the application of these software as well as the lack of proper management of the secretarial tasks could lead to problems in the dissemination of secretarial services.

Akpormi & Ordu (2009) stated that, the functions and effectiveness of the secretary in any organization depends on human and technological supports and the availability of office technologies as well as the skills and competencies of the secretary. This is a challenge to the secretary to change the lukewarm attitude of remaining in the back seat and move forward to attain new measures of modern secretarial practice. In developing nations, there are problems of poor funding and inadequate supply of technological facilities, poor level of computer literacy and lack of internet facilities awareness (Olson *et al.*, 2011).

According to Kelechukwe & Alasa (1998) and Ogbonna (2003) these problems causes interruptions that maximises the use of OAS by secretaries, which affects their operational performance. In line with this argument, this work would address some cognitive tasks difficulties of the secretary in terms of perception and attention in the delivery of secretarial tasks. Cognitive workload of the secretary could be a problem towards service delivery even with the best OAS if not well managed.

Several studies on secretarial profession were mainly focused on relationships between the secretarial practice and OAS as a tool for the secretary in executing secretarial tasks, this means that the previous studies usually based discussions about the tool the secretary uses in executing the secretarial tasks.

There are numerous problems affecting the maximum application of OAS by secretaries in their respective organisations, for instance in Nigeria, there are several problems that affect the secretary's operational performance (Murgor, 2015). These problems include poor and inadequate telecommunication facilities, poor level of computer literacy, absence of communication facilities, poor level of awareness of internet facilities and lack of importance of information to the organisation, as well as ignorance of policy makers' decisions on the power of information network on the economic and industrial development of an organisation. Poor funding, provisions of communication facilities, poor power supply, poor computer literacy, and lack of OAS infrastructure are also problems identified that directly affect the secretary's performance in using the OAS at their work place (Ogbonna, 2003; Gichoya 2005).

The above listed problems are the major barriers that contribute to the low secretarial service delivery causing much displeasure to organizations and employees.

On this background, the researcher intends to find out the causes and effects of the secretaries low performance with a view of offering strategies for improvements so as to place the secretaries on their appropriate position for maximum service delivery. This will be by exploring the secretaries OAS cognitive tasks with a view to identify how the OAS cognitive tasks support the Secretary as well as how the OAS influence secretarial practice.

#### **1.4 Problem Statement**

In line with the advancement of OAS, the introduction of new technologies into business offices has completely changed the modern office and as well transformed the perception of the secretaries towards their work. Office technologies are introduced in order to improve the quality of work and promote efficiency among workers.

On the other hand, the efficiency and effectiveness of secretarial service delivery in every organization depends on the combination of the office technologies and the required competencies of the secretary. Modern organisations have appreciated the role and relevance of the secretary as well as the need for the provision of the necessary OAS facilities.

Previous studies have established the relevance of OAS in improving the competency of the secretaries. However, such studies have been criticized for giving much emphasis on the tools the secretaries use in performing their tasks rather than the person that do the job. Secretary's perception and attention towards the job are equally important but have been ignored by several studies. Secondly, such studies also do not link the secretary's OAS competency with optimal service delivery. In view of this, there is the need to study and explore the cognitive tasks of the secretary in relation to OAS competency, and how the secretaries cognitive tasks influence secretarial practice as well as to investigate how OAS support the secretary in the execution of tasks.

Low service delivery is viewed as employees performance indicator average below what performance could be attained by an employee and is actually being achieved by another employee because the employee is skilful and has the zeal to work. Therefore, in order to increase secretarial practice performance, there is the

need to go beyond the identification of the importance or relevance of OAS to the profession or looking at OAS as a tool, but rather to look at how the secretaries cognitive tasks in using OAS could be explored in order to address the issue of cognitive tasks load which will lead to identifying measures that could improve the secretaries output. Cognitive work load of the secretary is referred to the total amount of mental working memory being used by the secretary. Cognitive load theory as a theory that is largely about how information and learning flows, or how information and learning is restricted through the human brain. The secretary's inability to comprehend and make quick decision in the execution of tasks or sometimes the miss-allocation of time and resources in executing tasks as a result of low mental energy of articulating measures to execute tasks which resulted to their low performance are some of the secretaries cognitive workload suffered by the secretaries.

Researchers need to pay close attention to cognitive task aspects of the secretaries in order to investigate some challenges in using the OAS with a view to developing measures that would enhance service delivery. Therefore, in this research work attention will also be paid to cognitive task aspects of the secretaries paid in order to investigate the challenges in using the OAS because OAS is the main tool the secretary uses to execute tasks in the office.

However, as mentioned in sub topic 1.3 above, there are many problems affecting the optimal application of OAS by secretaries in their working places which include poor and inadequate provision of office automation software facilities, and many other factors that include poor funding, inadequate power supply, lack of computer literacy, and lack of office automation software that directly affect the secretary's performance in using the office automation software.

The identified listed problems highlighted above form a major barrier that rendered the secretary to perform below expectation in other countries especially Nigeria. However, in Malaysia the above stated problems do not exist. The problems identified in the area where this study was carried out is lack of proper application of the secretary's OAS cognitive tasks in the execution of duties which resulted to low performance of the Secretaries.



On this note, this study intends to explore the secretary's OAS cognitive tasks how this tasks effects the secretaries performance and how the OAS influence secretarial practice with a view to offering strategies for improvements.

Another gap this study will bridge is to conduct a research that deals with Office Automation Software Cognitive tasks of the secretary which several studies on secretarial profession do not addressed. Quite a lot of studies were mainly focused on relationships between the secretarial practice and OAS as a tool for the secretary in executing secretarial tasks, this means that the previous studies usually based discussions about the tool the secretary uses in executing the secretarial tasks.

### **1.5 Significance of the Study**

Previous studies carried out on the secretarial profession were mainly focused on relationships between the secretary and OAS, the secretary and the office routine, the duties of the secretary and the relevance of OAS to the profession. There is no known study that deals with the exploration of secretary's OAS cognitive tasks in order to reduce the secretary's cognitive work load demands for effective and efficient secretarial management tasks delivery.

Secretaries and secretarial profession will immensely benefit from the study because it will upgrade their cognitive thinking required in order to perform their job and also assist the secretaries in reducing their cognitive workload stress. It is further hoped that secretaries would move towards upgrading their OAS skills for result oriented output.

The work is also going to be beneficial to the organisations where the secretaries work. This is by directly affecting the secretary's general performance which will contribute to the achievement of the objectives of the organisation.

Another beneficiary of this project is the larger community. This is in a way that the positive performance of the secretary on the achievement of goals and objectives of their organisation will lead to efficient service delivery to the larger community which will promote socio-economic well-being of the society.

## **1.6 Objectives of the Study**

The objectives of the study are:

- (i) To explore the secretaries Office Automation Software cognitive tasks
- (ii) To investigate elements of cognitive tasks that influence secretarial practice while using Office Automation Software.
- (iii) To investigate how Office Automation Software support the secretary in the execution of tasks.

## **1.7 Research Questions**

This study is guided by the following questions whereby the study would seek answers to the following research questions:

- (i) What are the cognitive tasks of the secretaries in the use of office automation software?
- (ii) How the elements of cognitive task influence secretarial practice?
- (iii) How does office automation software support the secretary in the execution of tasks?

## **1.8 Conceptual Framework**

The conceptual framework of this study was adapted from (Hendricks, 1999). The framework in this study is only focusing on two (2) elements which are attention and perception (Micheleon, 2006). He argues that cognition is how a person understands and acts. It is the set of abilities and processes that are part of every human action. (Micheleon, 2006) further argues that cognition has more to do with the processes of how an individual learns, remembers, solves problems and pays attention rather than with any actual knowledge. For instance, answering the telephone involves perception (hearing the ring tone), making decision (answering or not), motor skill



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